

## TimesTables

Create a new project called TimesTables\*, where the asterisk is replaced by your last name. When you complete this project, export the .aia file to your computer, and submit it on TEAMS. If you work in Android Studio or XCode, zip up everything associated with the project and submit that.

In this project, you will create a flashcard-style times tables study game. You will need to incorporate lists, randomization, and loops to accomplish this, and there are several opportunities for extensions outlined below. In general, **the layout of the user interface is up to you**—do what you think makes sense based on how you want your app to work.

I will be looking for a few general requirements:

- Include the Initialize method code for Screen1. On this code block, write a comment outlining the key functions of your app, the “extra” behavior you’ve included, and any limitations that may still be present
- Ensure your app’s components have sensible names for what they are (for example, scoreText is a better name than Label1)
- How do you both **generate** and **store** the required problems? We can easily create random problem after random problem, but this may be used by an individual who needs to know all times tables within a range of numbers—how can we ensure they see every problem?
- Is your interface aesthetically pleasing?
- How do lists, loops, variables, and/or procedures simplify the app’s code?

A few fun/interesting extensions and questions for you:

- Can your app keep score, keep high scores, or time the user on finishing every problem?
- Can you allow them to input what times tables they want up to (so are you limited to 0 x 0 through 12 x 12, or can the upper/lower bounds be set?)
- What happens when a problem is incorrect? Does it come back, or do they get another try?